

Serial No. 09/813,415
Page 2 of 16

RECEIVED
CENTRAL FAX CENTER

MAR 31 2008

IN THE CLAIMS:

Please consider the claims as follows:

1. (previously presented) A method for monitoring usage of resources allocated to a plurality of nodes of a network, comprising the steps of:

- assigning a parameter to each of a plurality of nodes of the network, wherein each parameter is indicative of a rate of change of usage of said resources of the node;
- locally monitoring, at each of the nodes, the rate of change of the usage of said resources of the node;
- reporting to a centralized management station of the network when the rate of change of the usage of the resources of one of the nodes exceeds a first threshold;
- initiating a poll of resources of nodes of the network by the centralized management station in response to reporting from the node or a time interval being exceeded;
- determining whether a sum of the currently reported rates of change of usage of node resources, received in response to the poll initiated by the management station, exceeds a second threshold; and
- generating an alarm if the sum of the currently reported rates of change of usage of node resources exceeds the second threshold, else updating the time interval.

2-5. (cancelled)

6. (previously presented) The method of claim 1, further including the step of adjusting the usage of the resources at one or more of said nodes.

7. (previously presented) A method for monitoring usage of a resource in nodes of a network, comprising the steps of:

- (a) monitoring usage of the resource in a node to determine when a rate of change of the usage exceeds a first predetermined threshold;
- (b) reporting to a management station of the network when the rate of change of

Serial No. 09/813,415
Page 3 of 16

the usage exceeds said first predetermined threshold; and

(c) initiating a poll of resources in the nodes of the network by the management station in response to reporting from the node or a time interval being exceeded.

8. (previously presented) A method for monitoring usage of resources in nodes of a network, comprising the steps of:

asynchronous reporting of an event to a management station of the network when a rate of change of a usage of at least one resource of said resources in any of said nodes deviates from a prescribed norm; and

periodic polling of said nodes in accordance with a polling interval, and aperiodic polling of said nodes in response to reporting of said event, wherein a tunable parameter is adjusted in response to the usage.

9. (previously presented) A method for managing a global resource of a network in order to reduce the amount of monitoring related traffic, comprising the steps of:

assigning a local threshold to each of a plurality of node resources of a respective plurality of nodes of the network;

reporting to a management station of the network when a value indicative of node resource usage exceeds the assigned local threshold as determined using local monitoring of the node resource;

initiating a poll, by the management station, of node resource usage by the nodes of the network in response to a determination that a sum of previously reported values indicative of node resource usage received from reporting nodes plus an upper bound of node resource usage for non-reporting nodes exceeds a threshold; and

generating an alarm if the sum of the currently reported values indicative of node resource usage, received in response to the poll initiated by the management station, exceeds the threshold.

10. (previously presented) A method for managing a global resource of a

Serial No. 09/813,415
Page 4 of 16

network in order to reduce the amount of monitoring related traffic, comprising the steps of:

assigning a local threshold to each of a plurality of node resources of a respective plurality of nodes of the network;

reporting to a management station of the network when a rate of change of usage of said node resource exceeds the local threshold as determined using local monitoring of the node resource, wherein said rate of change of usage of said node resource is determined using a variable time interval comprising a difference between a current time and a time at which the node was last polled by the management station;

initiating a poll, by the management station, of the node resource usage of the nodes of the network in response to receiving reporting from one of the nodes or a time interval being exceeded;

determining whether a sum of the currently reported rates of change of usage of node resources, received in response to the poll initiated by the management station, exceeds a threshold; and

generating an alarm if the sum of the currently reported rates of change of usage of node resources exceeds the threshold.

11. (previously presented) The method defined in claim 8 wherein said nodes are selected from the group consisting of routers, switches, bridges, and firewall devices.

12. (previously presented) The method defined in claim 8 wherein said nodes are selected from the group consisting of servers, hosts, and layer 4-7 switches.

13. (cancelled)

14. (previously presented) The method of claim 7, further comprising:
(d) summing all the reported rate of change of the usage of the resources; and
(e) generating an alarm if the sum exceeds a second threshold, else updating the

Serial No. 09/813,415
Page 5 of 16

time interval.